

Curriculum Vitae

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Privatdozent Mag. Dipl.-Ing. Dr. techn.

CISSP, CSSLP, CISM, CISA, CMC, CRISC



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1 Professional Experience

2006 —	Research Director with SBA Research.
2009 —	Dozent (~ Associate Professor) at TU Wien.
2004 – 2009	Assistant Professor at TU Wien.
2002 – 2004	Project Manager with ISIS Papyrus for health care (US) and financial institutions (Germany).
2001 – 2002	Assistant Area Manager with SCCH, Austria.
2000 – 2001	Visiting Assistant Professor at the Department of Mathematics and Computer Science, Beloit College, WI, USA.
1999 – 2000	Software Developer with SCCH, Austria.
1999	Internship IT Consultant with PriceWaterhouseCoopers.
1998	Military Service (Software Engineer) at the Central Agency of Military Computing of the Austrian Armed Forces.

2 Teaching Experience

2016	Invited Professor Université P. Sabatier, Toulouse.
2004 —	Responsible for the teaching focus in applied information security as Associate Professor (Privatdozent) at TU Wien. (2004-2009 as Assistant Professor)
2012 –	Visiting Lecturer at the National Institute of Informatics (NII), Tokyo.
2011 – 2012	Visiting Associate Professor at the 'Gheorghe Asachi' Technical University of Iasi, Rumania.
2007 –	Lecturer at University of Applied Sciences Vienna and the Upper Austria University of Applied Sciences.
2000 – 2001	Visiting Assistant Professor at the faculty of Mathematics and Computer Science, Beloit College, USA.

3 Scholarly Activities

- ◇ Program Co-Chair or General Chair of
 - Esorics 2017, Indiana, IN.
 - **ACM CCS 2016**, Vienna, Austria.
 - Esorics 2015, Vienna, Austria.
 - ACM SACMAT 2015, Vienna, Austria.
 - ICISSP 2015, Angers, France.
 - ARES 2014, Fribourg, Switzerland.
 - IFIP DBSec 2014, Vienna, Austria.
 - GI Sicherheit 2014, Vienna, Austria.
 - TRUST 2012, Vienna Austria.
 - ARES 2009, Fukuoka, Japan.
 - ED-MEDIA 2008, Vienna, Austria.
- ◇ ACM SIGSAC Service Award 2015.
- ◇ Member of ERCIM Cor Baayen Award Committee.
- ◇ Keynotes and Invited Talks
 - Keynote on *Research Methods in Applied Security Research* at RCIS, Brighton, 2017.
 - Keynote on *Graduate Research in Information Security* at EMENA-TSSL 2016.
 - Keynote on *Research Ethics in Information Security* at ICISSP 2016, Rome.
 - Invited talk on *Research Methods in Information Security* at ICISSP 2015, Vienna.
 - Invited lectures at TU Braunschweig, City University of New York, and Rutgers University (Mar 2015).
 - Keynote on *Empirical and Applied Research in Information Security* at the CRISIS, 2014.
 - Keynote at the IIWAS Conference on *Secure Software Engineering* for Mobile Devices 2014.
 - Keynote on *Advanced Persistent Threats & Social Engineering* at the SECrypt, 2014.
 - Keynote on *Social Engineering Attacks on the Knowledge Worker and the Digital Native* at the International Conference on Security of Information and Networks (ACM SIN 2013).
 - Invited research lecture series *Recent Trends in Cyber Security* at NII, Tokyo. Feb 2013, Feb 2014.
 - Keynote on *Is Security an Afterthought when Designing Apps?* at the IIWAS Conference on Secure Software Engineering for Mobile Devices 2012.
- ◇ Member of the Editorial Board of Computers & Security (COSE), Elsevier.
- ◇ Member of Europol's European Cybercrime Centre's academic advisory network.
- ◇ Associate Editor EURASIP Journal on Information Security, Springer.
- ◇ Editorial Board of ACM Computing Reviews.
- ◇ Member of the Executive Committee of EdMedia / Innovate Learning Conference 2017–2020.
- ◇ Associate Editor International Journal of Critical Computer-Based Systems.
- ◇ IEEE SMC Technical Committee on Homeland Security (TCHS) 2017–

- ◇ Special Issues Editor
 - ERCIM News Special theme: 'Cyber Security', 2016.
 - Special Issue on Cyber-Physical Systems, EURASIP Journal on Information Security, Springer, 2016.
 - Special Issue on Availability, Reliability and Security, Computers & Security (COSE), Elsevier, planned for 2015.
 - EURASIP Journal on Information Security, Springer, 2014.
 - ERCIM News Special theme: 'Mobile Computing', No. 93, 2013.
 - Special Issue on Availability, Reliability and Security, Computers & Security (COSE), Elsevier, Vol 17, No 4, May 2013.
 - Special Issue on Availability, Reliability and Security, ISTR Information Security Technical Report, Elsevier, 2012.
 - IEEE Transactions on Systems, Man, and Cybernetics: Availability, Reliability and Security, IEEE, 2010.
- ◇ CHIST-ERA reviewer for the call 'User-Centric Security, Privacy and Trust in the Internet of Things', 2016.
- ◇ Program Committees (selection)
 - CCS 2016, 2017
 - Esorics 2015, 2016, 2017
 - WISE 2015
 - AsiaCCS-SCC 2015
 - ACM CACM
- ◇ Member of the Steering Committee, ED-MEDIA 2009–2011.
- ◇ Tutorial at WWW2016 on Cryptocurrencies: Cryptographic Currencies Crash Course, Montreal 2016.
- ◇ Tutorial at ACM CCS 2017 on Cryptocurrencies: Condensed Cryptographic Currencies Crash Course, Vienna 2016.
- ◇ Summer schools
 - Chair IPICS 2009, IPICS 2012, Vienna; lecturer IPICS since 2008.
 - Chair BEST 2012, Vienna.
 - Lecturer at the Summer School 'Building Trust in the Information Age' in Cagliari, Italy, 2012.

4 Grants

Project name	Description	Grant	Years	Budget	Role
SBA Research (K1)	Information Security Research Center	COMET	2017-2021	19.340.000	Research Director
SBA Research (SBA2)	Information Security Research Center	COMET	2014-2017	9.000.000	Research Director
Target	Container Security	JR-Center	2017-2020	267.000	PI Ext. Module
SeSC	Secure Execution of Smart Contracts	FFG Bridge	2017-2019	375.473	PI
USmile	Mobile Security	JR-Center	2014-2017	200.000	PI Ext. Module
CyPhySec	Framework to Cyber-Physical System Security	Bridge	2014-2017	280.000	PI
DCloud	Decision Framework Model for Cloud Based System Migration	FWF	2014-2017	355.540	PI
BitCrime	Electronic Currencies in Cybercrime	FFG	2014-2016	158.500	proj. member
SpeedFor	File Forensics	Bridge	2014-2016	314.000	project lead
TLSiP	Transport Layer Security in Practice	Bridge	2014-2016	303.000	project lead
Secure EGov	Critical Infrastructures for E-Government	Kiras	2014-2015	72.000	project lead
CyberROAD	Roadmap on Security Research	FP7 CSA	2014-2016	64.000	WP lead
MAPO	Mobile Security, Privacy, and Obfuscation	Innovat.LV	2013-2014	969.606	PI
DIANGO	Open Source Intelligence	Kiras	2013-2015	921.032	project lead
CERT-Comm	CERT Communication Model	Kiras	2013-2015	30.360	WP lead
ECAO	Software Obfuscation (Qualifizierungsseminar)	FFG	2013	47.513	project lead
DIANA	Open Source Intelligence	Kiras	2011-2013	666.610	project lead
Digitales Alibi	Building Fake Alibis using Social Networks	Femtech	2013	10.600	project lead
IPv6	IPv6 attacks	Femtech	2013	10.600	project lead
ConSec	Context-aware Security Analysis von Mashups	Femtech	2012	10.600	project lead
Web 2 Privacy	Privacy considerations on social media	Femtech	2012	10.600	project lead

Project name	Description	Grant	Years	Budget	Role
WebSec	Secure Web architectures	Femtech	2012	7.200	project lead
CyanProxy	Web 2.0 Extensions for a Web proxy	Feasibility study	2012	39.200	project lead
SCUDO	Situational Awareness	Kiras	2012-2014	150.000	proj. member
SBA Research (SBA2)	Information Security Research Center	COMET	2010-2014	9.919.000	Research Director
HardOb	Hardware Obfuscation	FIT-IT	2010-2013	118.988	PI
MobseTip	Security Testing	Bridge/ITEA	2011-2014	520.200	project lead
Silicon Malware	Study on Hardware Trojans	Kiras	2010-2012	146.240	PI
Silicon Malware 2	Secure Development Lifecycle for Hardware	FIT-IT	2012-2014	462.420	PI
FAMOS	Female Academy for Mentoring, Opportunities and Self-Development	Femtech	2010-2012	12.871	proj. member
INMOTOS	risk assessment of ICT critical infrastructures contingency plans	EU	2010-2011	194.136	proj. member
Inform	Internet Forensic Framework	FIT-IT	2010-2013	440.229	PI
AFOR	Forensic Guidelines	Kiras	2010-2013	150.000	PI
Moses4EGov	Security Requirements Modeling	Kiras	2010-2011	90.000	proj. member
SBA	Information Security Research Center	K-Ind	2006-2010	8.000.000	Research Director
Pathfinder	Malicious Code Analysis and Detection	FIT-IT	2007-2009	613.930	project lead
Security Ontologies	Formalizing information security knowledge	FIT-IT	2008-2011	113.838	proj. member
PIPE	Pseudonymization in e-Health	FIT-IT	2008-2010	519.014	project lead
Secure 2.0	Securing Information Sharing on Web 2.0	FIT-IT	2009-2011	490.750	project lead
FFG KMU Paket	Supporting Austrian SMEs to start ongoing re-search and innovation activities	FFG	2008—	200.000	project lead

5 Continuing Education

- ◇ French A2, 10 days, 2016–2017.
- ◇ Presentation Training (nextbeststep.at), 6 days, 2015–2016.
- ◇ General Management Training for Research Centers (Leadership, Change Management, Personnel Management & Gender Sensitivity), 4 days, 2012–2013.
- ◇ Media- and Interviewtraining (M.T. Euler-Rolle), 2013.
- ◇ Certified in Risk and Information Systems Control (CRISC 1002115), 2010.
- ◇ Seminar on Modern Advanced Cryptography (Ueli Maurer), 2 days, 2010.
- ◇ Oracle Hardening & Patching and Auditing (Alexander Kornbrust), 3 days, 2010.
- ◇ Memory Forensics (Andreas Schuster), 2 days, 2010.
- ◇ Seminar on Pedagogy in Teaching, 2 days, 2010.
- ◇ Certified Secure Software Lifecycle Professional (CSSLP 83930), 2009.
- ◇ Presentation and Voice Training, 3 days, 2008.
- ◇ Certified Management Consultant (CMC), 10 days, 2007/08.
- ◇ Certified Information Security Manager (CISM 0706623), 2007.
- ◇ Certified Information Systems Security Professional (CISSP 83930), 2006.
- ◇ Certified Information System Auditor (CISA 0646152), 2005.
- ◇ Visual Studio 2005 Ascend Training, 5 days, 2005.
- ◇ The Art of Teaching (Kunst der Lehre), University of Vienna, 3 weeks, 2004/05.
- ◇ ISIS Papyrus courses on document automation and archiving, 9 weeks in 2002/2003.
- ◇ Communication, Conduct of Negotiations, Managing Conflicts (Kössler), 4 days, 2001.
- ◇ Project Management (Microsoft), 5 days, 2000/01.
- ◇ Risk Management (Microsoft Solutions Framework), 2000.
- ◇ The Global Consultant (PriceWaterhouse Coopers), 1 week, 1999.

6 Academic Education

7/2009	Habilitation at the TU Wien (venia docendi for applied informatics).
6/2000	Graduation (M.A.; Mag.) from the Vienna University of Economics and Business.
12/1999	Graduation (Ph.D.; Dr. techn.) from doctoral program in Computer Science cum laude.
4/1997 – 10/1999	PhD Thesis in Computer Science at the Institute of General Chemistry at the TU Wien.
6/1997	Graduation (M.Sc.; Dipl.-Ing.) from the TU Wien.
2/1994 – 6/2000	Studies in Business Administration (focus on languages) at the Vienna University of Economics and Business.
10/1993 – 6/1997	Studies in Computer Science at the TU Wien.

7 Professional Affiliations

- ◇ ACM (senior member), chair of ACM SIGSAC chapter Vienna.
- ◇ IEEE, IEEE Computer Society (senior member), IEEE SMC, chair of IEEE CS/SMC chapter Austria.
- ◇ IFIP chair of WG8.4.
- ◇ ISACA (academic advocate).
- ◇ OCG Austrian Computer Society (AK Sicherheit).

8 Supervision of Master's and Ph.D. Theses

8.1 PhD theses (completed)

1. Security and Privacy in Mobile Environments, Georg Merzdovnik, 2017.
2. Secret Communication in the Internet, Johanna Ullrich, on track for sub auspiciis praesidentis, 2016.
3. Usable Security and Privacy Challenges with Disruptive Technologies, Katharina Krombholz, 2016.
4. Malware Trough The Looking Glass: Malware Analysis in an Evolving Threat Landscape, Martina Lindorfer, sub auspiciis praesidentis, 2016.
5. Hardware-assisted Code Obfuscation, Sebastian Schrittwieser 2014.
6. New Challenges in Digital Forensics: Online Storage and Anonymous Communication, Martin Mulazzani, 2014
7. Security and Privacy Implications of Third-Party Access to Online Social Networks, Markus Huber, 2013.
8. Designing Business Continuity Response – A novel approach enhancing risk-aware business process management with dynamic resource allocation, Simon Tjoa, 2012.
9. Identifying and Incorporating Learning Styles and Affective States in Web-based Learning Management Systems, Farman Ali Khan, 2011.
10. Ontology based Framework for Information Security Risk Management, Andreas Ekelhart, 2011.
11. Governance, Risk & Compliance (GRC) for Information Systems: Towards an Integrated Approach, Nicolas Racz, 2010.
12. Virtualized Grid Computing Systems Offering Secure LOGs, David Huemer, 2010.
13. Ontology- and Bayesian-based information security risk management, Stefan Fenz, 2008.
14. PIPE: Pseudonymization of Information for Privacy in e-Health, Bernhard Riedl, 2008.

8.2 Master's theses (last 5 years)

1. The end of the password era, Mathias Bachl, TU Wien, 2017.
2. Deferred Peerings as Obstacles on the Internet, Thomas Rieder, TU Wien, 2016.
3. Monitoring Net Neutrality of Austrian ISPs, Thomas Schreiber, TU Wien, 2016.
4. IPv6 High Performance Scanning, Christoph Kukovic, TU Wien, 2016.
5. Der Einfluss von Bildungsmassnahmen auf die Relevanz von Internet Privacy für Endnutzer, Christian Schmidt, TU Wien, 2016.
6. Confidential Desktop: Towards an access control framework for preserving data confidentiality based on environmental conditions, Sophie Weiss, TU Wien, 2015.
7. Didaktische Methoden im Kontext der kritischen Informationsinfrastruktur, Christian Proschinger, TU Wien, 2015.
8. Analysis of Internet-wide TLS Usage Beyond HTTPS, Wilfried Mayer, TU Wien, 2015.
9. Estimating Security in Open Source Web Applications, Tamas Hernadi, TU Wien, 2015.
10. Straightjacket Tightening Process Execution Policies at Runtime, Adel Gadllah,

- TU Wien, 2015.
11. Automated Discovery of Secure Websites, Dominik Fruehwirt, TU Wien, 2015.
 12. Lower-Latency Anonymity: Latency Reduction in the Tor Network using Circuit-Level Round-Trip-Time Measurements, Robert Annessi, TU Wien, 2014.
 13. Detecting Privacy Leaks in the Private Browsing Mode of Modern Web Browsers Through Process Monitoring, Herbert Brunner, TU Wien, 2014.
 14. High Performance Data Crawling in Online Social Networks, Maurice J. Wohlkönig, TU Wien, 2014.
 15. Btrfs Filesystem Forensics, Andreas Juch, TU Wien, 2014.
 16. On the Applicability of Secret Sharing Cryptography in Secure Cloud Services, Martin Kirchner, TU Wien, 2014.
 17. Appropriate Obfuscation of Location Information on an Application Level for Mobile Devices, Christoph Hochreiner, TU Wien, 2014.
 18. Zusammenwirken von eDiscovery- und Fallbearbeitungssystemen in der polizeilichen Ermittlungsarbeit, Peter Grassnig, FH Wiener Neustadt, 2014.
 19. Sicherheitsauswirkungen von verknüpften Cloud-Diensten, Peter Babiarz, FH Technikum Wien, 2014.
 20. Empirische Erfassung von Angriffsmöglichkeiten unter HTML5, David Irlweg, FH Technikum Wien, 2014.
 21. DoS, DDos und andere netzwerkbasierte Attacken - Wie bleibt mein Unternehmen online?, Florian Kattinger, FH Technikum Wien, 2014.
 22. Sicherheits Aspekte von HTML5 und JavaScript, Matthias Klinsk, FH Technikum Wien, 2014.
 23. Android Forensics - Generic approach to the analysis of Apps artifacts, Edgar Reales-Gaita, FH Technikum Wien, 2014.
 24. Privacy in Cloud-based Collaboration Environments, Markus Sattlegge, FH Technikum Wien, 2014.
 25. Privacy Enhancing Measures for SaaS Users, Sebastian Schwarz BS, FH Technikum Wien, 2014.
 26. Privacy in Google-Based Services, Alexander Wagne, FH Technikum Wien, 2014.
 27. Funktionsweise, Sicherheit und Schwachstellen in IPv6 Netzwerken, Lucas Weig, FH Technikum Wien, 2014.
 28. On The Applicability Of Secret Sharing Cryptography In Secure Cloud Services, Martin Kirchner, TU Wien, 2014.
 29. Security Challenges in Mobile Middleware, Peter Aufner, TU Wien, 2014.
 30. Towards automated digital alibis, Stefanie Beyer, TU Wien, 2013.
 31. Forensic Analysis of Web Data, Erhard Dinhobl, TU Wien, 2013.
 32. Sichere Speicherung von sensiblen Informationen auf Smartphones, Zeno Wultsch, Technikum Wien, 2013.
 33. Defence side reconnaissance: Preliminary surveying of an attackers profile, Peter Frühwirt, TU Wien, 2013.
 34. Storage and Visualization of Heterogeneous Data from Online Social Networks, Christian Bors und Robert Krejci, TU Wien, 2013.
 35. On WebSockets in Penetration Testing, Robert Koch, TU Wien, 2013.
 36. Automating Dynamic Shellcode Analysis, Merzdovnik Georg, TU Wien, 2012.